UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 17 2004

OFFICE OF
AIR AND RADIATION

Mr. Lloyd Piper, Acting Manager
Carlsbad Field Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, New Mexico 88221-3090

Dear Mr. Piper:

The U.S. Environmental Protection Agency (EPA) received the U.S. Department of Energy (DOE) Compliance Recertification Application (CRA) for the Waste Isolation Pilot Plant (WIPP) on March 26, 2004. On May 20, July 12, and September 2, 2004 (Docket A-98-49: II-B3-72, II-B3-77, and II-B3-74, respectively), we provided you with comments related to completeness of the CRA documentation. We appreciate your responses to many of our comments to date.

As part of our ongoing review, we have identified additional documentation regarding the waste inventory that is needed to constitute a complete application. The waste inventory described in the CRA includes waste streams from a number of tanks of radioactive waste located at the Hanford site in Washington State. The characteristics of this waste are incorporated in the recertification performance assessment calculations.

It is the Environmental Protection Agency's (EPA's) understanding that DOE has managed this tank waste as high-level waste. As you know, the WIPP Land Withdrawal Act (LWA) prohibits disposal of high-level waste at WIPP.

In view of this legislative restriction, EPA is considering whether it is appropriate to include the Hanford tank waste in the CRA performance assessment. Public comments provided to EPA on the CRA have asserted that the prohibition of high-level waste in WIPP should preclude these wastes from being considered in the recertification performance assessment. (See, for example, Docket A-98-49, item II-B3-77.) While we have made no determination on this particular point, I would emphasize that the inclusion of wastes in a performance assessment or compliance application *does not* constitute approval by EPA for the waste to be emplaced for disposal. In all cases, waste must be shown to meet EPA's WIPP waste characterization and other relevant requirements before being approved for disposal in WIPP.

In order to fully assess the legality and technical impacts of including the tank waste in the inventory, we require that DOE provide additional information regarding the tank waste. By itself, DOE's prior management of the tank contents as high-level waste would not preclude DOE from making an updated, more accurate determination that this waste is transuranic (TRU)

However, the CRA fails to provide a full and clear explanation for why and how the tank wastes, which historically have been managed as high-level radioactive waste, might be expected to meet the requirements for TRU waste and, thus, be eligible for disposal at the WIPP. EPA and DOE staff and contractors discussed the nature of the waste in the tanks at a September 2004 site visit to Hanford (Air Docket A-98-49, Item II-B3-75). At that time, DOE expressed the position that process knowledge on the tank waste might be sufficient to justify the designation of some tanks as TRU waste; for other tanks, it appears that further explanation, testing, or treatment might be required. For all twelve (12) tanks of waste included in the CRA performance assessment inventory, EPA is seeking DOE's basis for considering them as TRU waste instead of high-level waste.

In addition, EPA is requesting that DOE describe any potential treatment (e.g., removal of fission products, solidification, etc.) available and/or under consideration for each of these waste streams to meet the WIPP waste acceptance criteria. Detailed waste characterization data on every tank is not expected or needed. However, DOE must describe its rationale for how the tank waste was identified for inclusion in the inventory, and for why the tank waste might reasonably be expected to be disposed at WIPP in the future. Enclosure 1 identifies the tanks and waste streams of interest to EPA.

We have similar concerns regarding waste streams in the CRA inventory from the Hanford K-Basin sludges (waste streams RL-W445 and RL-W446). Based on the association of these wastes with underwater storage of spent fuel rods, stakeholders have likewise raised questions about whether this sludge comprises spent nuclear fuel or high-level waste. Again, the CRA does not provide a clear discussion of the basis for designating this waste as transuranic waste. As discussed above, we require that you provide an explanation of the basis for including this waste in the inventory, as well as a description of any additional testing or treatment expected (or being considered) to render the waste eligible for disposal at the WIPP.

We appreciate your prompt attention to this request. If you have any questions, please contact Betsy Forinash at 202-343-9233.

Sincerely,

Elizabeth A.Cotsworth , Director
Office of Radiation and Indoor Air

cc: Lynne Smith, DOE/HQ
Russ Patterson, DOE/CBFO
Mark French, DOE/Hanford
John Kristofzski, CH2M Hill/Hanford
Steve Zappe, NMED

Enclosure 1

Hanford Tank Wastes For Which Information is Requested
(Waste Stream Information From CRA Appendix DATA, Attachment F, Annex J Waste Profile Sheets and the September 2004 Hanford Meeting)

Waste Stream (Type)	Tank(s)	Process (resulted in "solidified aqueous waste slurry")
RP-W013 (RH)	SY-102	Plutonium Finishing Plant
RP-W016 (RH)	AW-103, AW-105	PUREX TRU Cladding Removal
RP-W754 (CH)	B 201-204 and T 201-204 series tanks	224 Solidified Inorganic Waste
RP-W755 (CH)	T-111	Bismuth Phosphate Process TRU Solids